

Homework 7: Due Wednesday May 27th

- (1) Exercise 2.1.12
- (2) Exercise 2.1.14
- (3) Prove that $\{(1, 2), (2, 1)\}$ is a spanning set in \mathbb{R}^2 and is also linearly independent.
- (4) Consider the set $S = \{\mathbf{v}, \mathbf{e}_1, \mathbf{e}_2\} \subseteq \mathbb{R}^2$, where \mathbf{v} is a given vector in \mathbb{R}^2 . Prove that S is linearly dependent.